

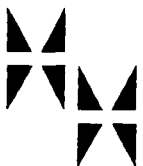


**Final Report
Mercury Regulator Removal Action
Newton Iron & Metal, Inc.
901 W. Marquette St.
Ottawa, Illinois**

**Prepared for:
Nicor Gas**

March 2001

**By:
James E. Huff, P.E.
Sarah Monette, P.E.
Lisa M. Paulson**



HUFF & HUFF, INC.
ENVIRONMENTAL CONSULTANTS
LaGRANGE, ILLINOIS

TABLE OF CONTENTS

CERTIFICATION.....	ii
1. INTRODUCTION	1
1.1 Report Overview	1
1.2 Site Location and Layout.....	1
1.3 Personnel.....	1
1.4 Schedule.....	4
2. WORK ACTIVITIES	5
2.1 Overview.....	5
2.2 Material Sorting and Removal	5
2.3 Soil Sampling and Excavation	6
2.3.1 Screening and Sampling Locations.....	6
2.3.2 Soil Sampling Results	6
2.4 Air Monitoring.....	11
3. COSTS	13

LIST OF FIGURES

Figure 1-1	Site Location Map.....	2
Figure 1-2	Site Layout Map.....	3
Figure 2-1	Sample Location Grid.....	7

LIST OF TABLES

Table 2-1	Soil Headspace Lumex Meter Readings	8
Table 2-2	Tier 1 Comparison: Soil Component of Groundwater Ingestion.....	9
Table 2-3	Tier 1 Comparison: Soil Ingestion.....	10
Table 2-4	Tier 1 Comparison: Inhalation.....	12

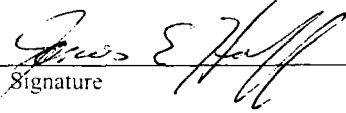
LIST OF APPENDICES

Appendix A	Work Activity Photographs
Appendix B	Waste Manifests and Shipping Papers
Appendix C	Laboratory Reports

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CERTIFICATION


Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate and complete.


Signature

3/24/2001
Date

James E. Huff, P.E.
Name

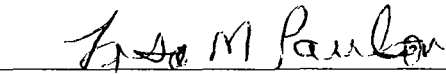
Vice President, Huff & Huff, Inc.
Title, Company


Signature

03.23.01
Date

Sarah Monette, P.E.
Name

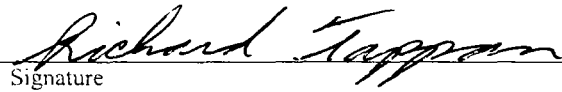
Sr. Project Engineer, Huff & Huff, Inc.
Title, Company


Signature

3-23-01
Date

Lisa M. Paulson
Name

Environmental Scientist, Huff & Huff, Inc.
Title, Company


Signature

3/23/01
Date

Richard Tappan
Name

Mgr. Environmental Affairs, Nicor Gas
Title, Company

1. INTRODUCTION

1.1 Report Overview

This document presents the “Final Report” for the Nicor Gas cleanup activities at the Newtonson Iron & Metal Inc. scrap yard (hereafter called “Scrap Yard”). The cleanup activities included removal of mercury-type regulators and soil testing.

The work was performed in accordance with the requirements of the “Administrative Order Pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, Docket No. VW-00-C-610,” issued by the United States Environmental Protection Agency (U.S. EPA) in September 2000, and the U.S. EPA-approved “Remedial Action Work Plan,” dated October 2000.

1.2 Site Location and Layout

The Scrap Yard is located at 901 W. Marquette Street in Ottawa, Illinois. Figure 1-1 depicts the site location and Figure 1-2 depicts the site layout, including the location where Nicor Gas scrap metal had been accumulated.

This scrap metal area was identified during a site inspection by the Illinois EPA and subsequently during a site walkover. Huff & Huff conducted the site walkover on September 28, 2000 with the site owner (Mr. Dan Szafranski), Illinois EPA, and U.S. EPA. The entire site was inspected, looking for regulators. The scrap pile area depicted on Figure 1-2 was identified by Mr. Szafranski as the only area where Nicor Gas scrap metal had been stored. This area was consistent with the site reconnaissance and was identified by Illinois EPA and U.S. EPA as the only area requiring a response under the 106(a) Order.

1.3 Personnel

Key personnel associated with this project are:

Mr. Steven Faryan	On-Scene Coordinator	U.S. EPA
Ms. Claudia Macholz	Project Manager	Nicor Gas
Mr. James E. Huff, P.E.	Project Coordinator	Huff & Huff
Mr. Perre Krizanek	Contractor	Heritage Environmental Services
Mr. Dan Szafranski	Site Owner	Newtonson Iron & Metal

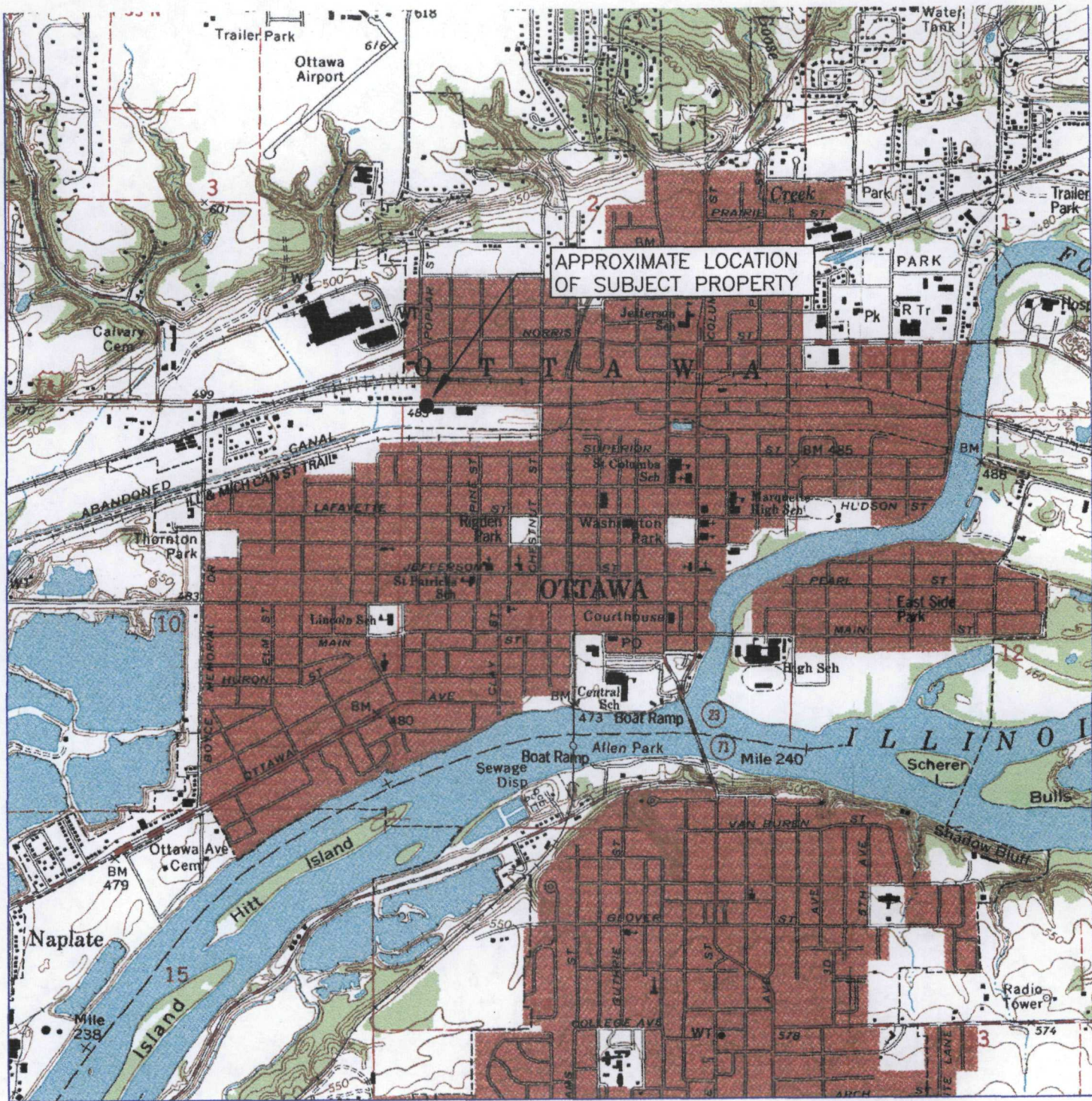
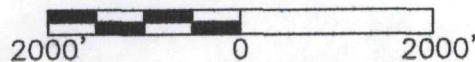
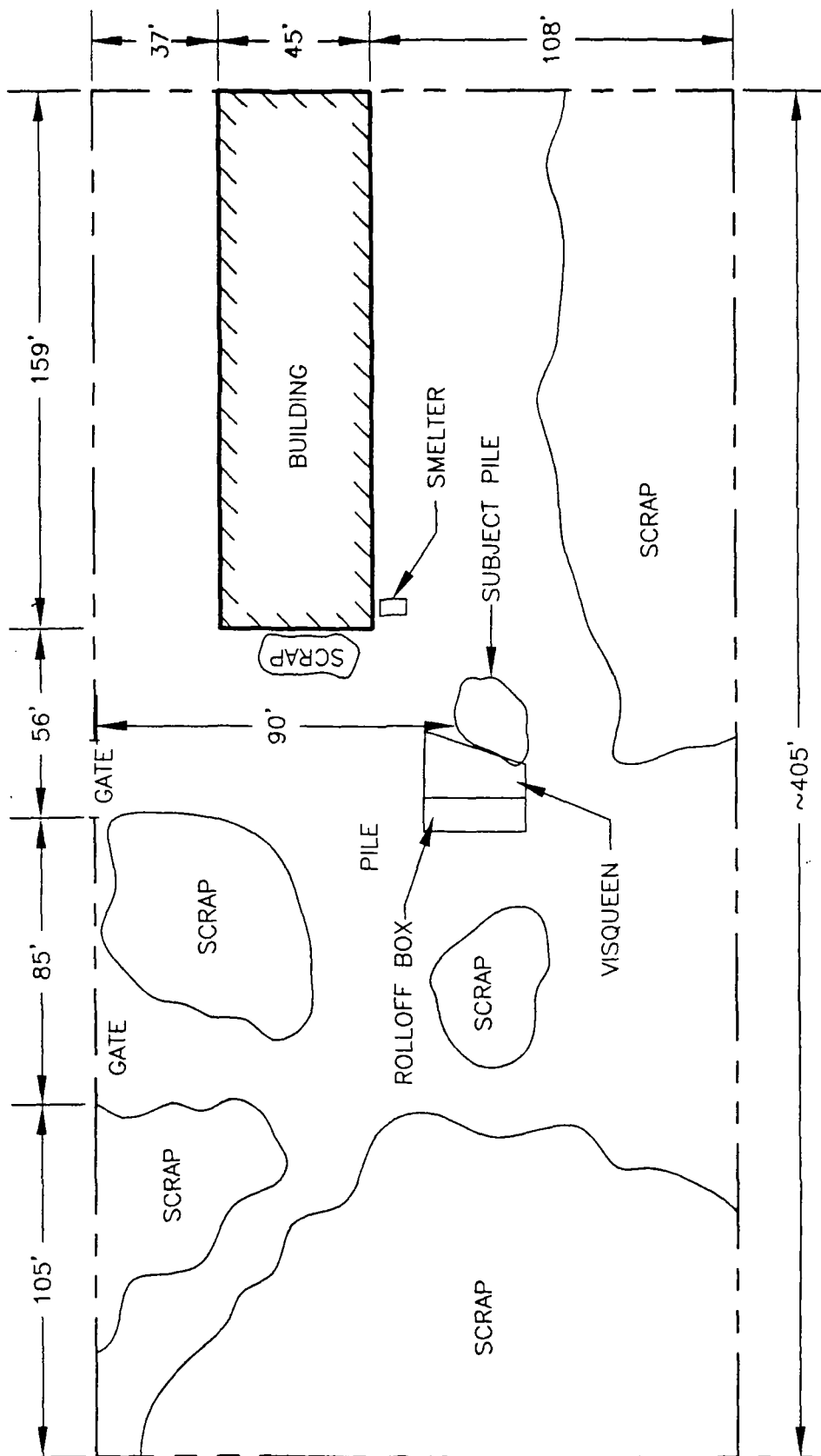


FIGURE 1-1
SITE LOCATION MAP
NEWTSON IRON & METAL INC.
OTTAWA, ILLINOIS



SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY
OTTAWA, ILLINOIS QUADRANGLE

MARQUETTE STREET



NOT TO SCALE



FIGURE 1-2
SITE LAYOUT MAP
NEWTONSON IRON & METAL INC.
OTTAWA, ILLINOIS

1.4 Schedule

The Section 106(a) Order was issued in September 2000. Work began at the Scrap Yard on October 20, 2000 and was complete by October 31, 2000. This time frame is in accordance with the U.S. EPA-approved schedule. (Work activities are detailed in Section 2.)

2. WORK ACTIVITIES

2.1 Overview

Work activities were performed in general compliance with the site work plan ("Removal Action Work Plan, October 2000"), as approved by U.S. EPA and Illinois EPA. Field changes to the approved site work plan were made as directed by the U.S. EPA On-Scene Coordinator.

Work activities included:

- scrap metal sorting (to segregate mercury-type regulators)
- soil sampling (to determine potential mercury impacts to underlying soil)
- material removal (mercury-type regulators, scrap metal, and debris)
- air monitoring (to assess mercury levels in ambient air)

Site photographs are presented in Appendix A. Waste manifests and shipping papers are presented in Appendix B. Steve Faryan, the U.S. EPA On-Scene Coordinator, was present throughout the above listed work activities, and provided approval of the appropriateness of the work performed at the site.

2.2 Material Sorting and Removal

Huff & Huff (James Huff, Lisa Paulson, and Jose Gonzalez) mobilized to the site on October 20, 2000, with the contractor, Heritage Environmental Services. The U.S. EPA On-Scene Coordinator, Steve Faryan, was present, along with the U.S. EPA contractor, Ecology & Environment. Ecology & Environment provided a Lumex Meter for mercury vapor monitoring. Sorting and removal of the Nicor scrap began at 9:30 AM, and was complete by 11:15 AM.

The following table summarizes the material removed from the site, the classification of each waste stream, and the destination to which it was sent.

Material	Quantity	Waste Type	Destination
Mercury-Type Regulators	4 Regulators	High-Level Hg Hazardous Waste	To Superior Special Services Via Heritage (Lemont)
Scrap Metal, Personal Protective Equip.(PPE) and Debris	1 Roll-Off Box	Non-Hazardous Waste	To Newton County Landfill

2.3 Soil Sampling and Excavation

2.3.1 Screening and Sampling Locations

Soil beneath the identified scrap pile was evaluated after all scrap metal was removed. The evaluation included screening for mercury vapor with a Lumex Mercury Vapor Analyzer (Lumex Meter) and laboratory analysis of mercury (total and TCLP).

The area was divided into a grid of 10 feet by 10 feet squares, as depicted on Figure 2-1. Soils at each grid point were screened with the Lumex Meter (closed-cup headspace method). All grid points achieved readings of 0.010 mg/cu m mercury or less. Table 2-1 presents the Lumex Meter readings.

In addition, soil samples were collected for laboratory analysis. One soil sample was collected from each row of the grid. The sample was collected from the grid point having the highest Lumex Meter reading in the row (see Table 2-1). This selection method helped to assure evaluation of the area of greatest potential impact.

The selected soil samples were analyzed for mercury (total and TCLP) and pH at Test America Laboratories in Bartlett, Illinois. The total mercury results range from 10.7 mg/kg to 24.5 mg/kg. No TCLP mercury was detected. Copies of the laboratory analytical reports are provided in Appendix C.

2.3.2 Soil Sampling Results

Tables 2-2 through 2-4 present the soil sample results in comparison to the approved cleanup objectives. These objectives are the most conservative Illinois "Tier 1" cleanup objectives for industrial/commercial properties (including construction worker exposure). Each of the three Tier 1 exposure pathways is considered: soil component of groundwater ingestion, soil ingestion, and inhalation.

- Soil Component of Groundwater Ingestion (Class I)

The Tier 1 objective for the soil component of Class I groundwater ingestion pathway is 0.002 mg/L TCLP mercury. TCLP mercury was not detected in any sample; all results were less than 0.0002 mg/L (see Table 2-2).

- Soil Ingestion

The Tier 1 objective for the soil ingestion pathway is 610 mg/kg total mercury for industrial/commercial exposure and 61 mg/kg for construction worker exposure. All sample results achieved the objectives; the highest result was 24.5 mg/kg at D2 (see Table 2-3).

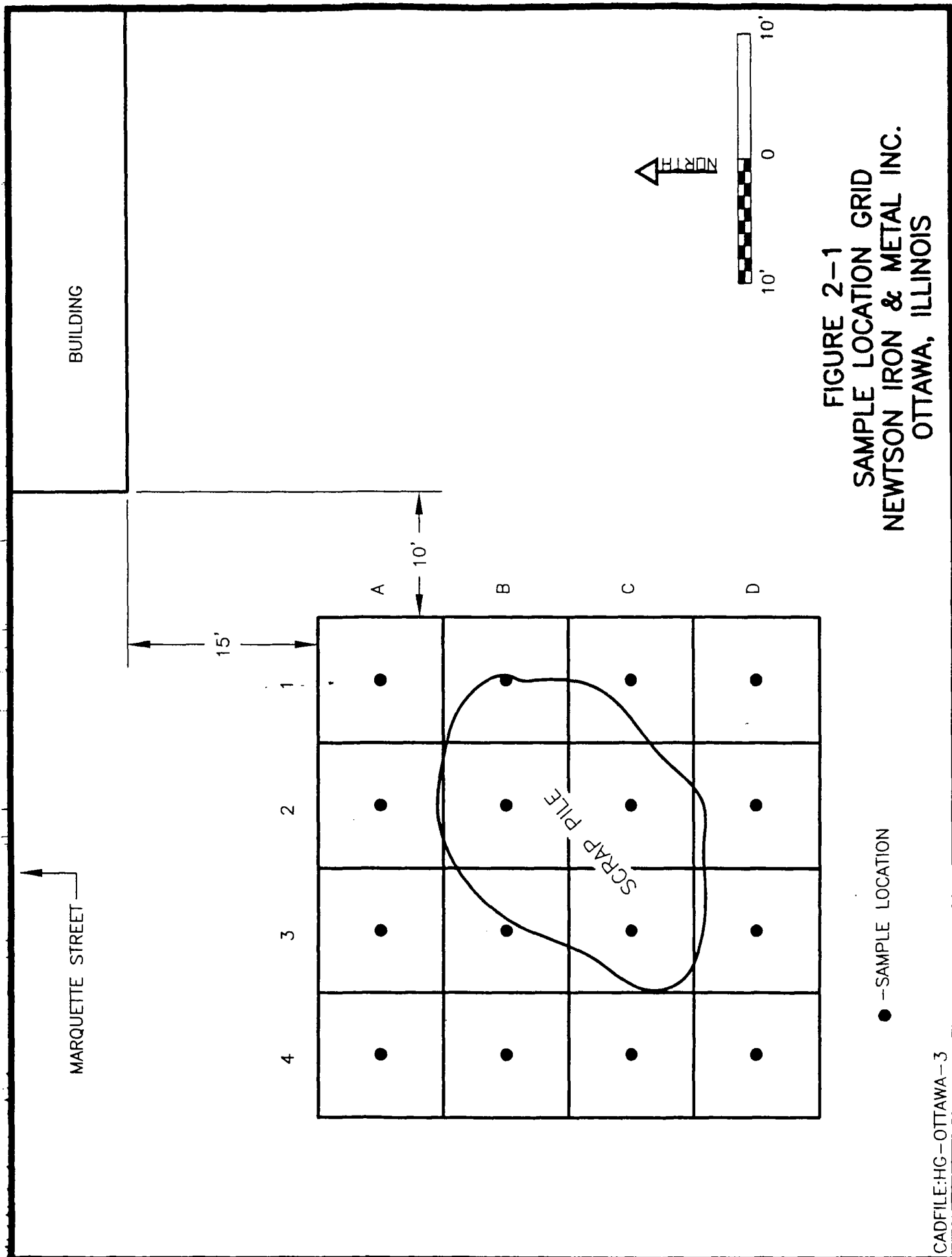


FIGURE 2-1
SAMPLE LOCATION GRID
NEWTONSON IRON & METAL INC.
OTTAWA, ILLINOIS

● -SAMPLE LOCATION

TABLE 2-1
 NEWTSON IRON & METAL INC.
 SOIL HEADSPACE LUMEX METER READINGS ^{a/}

Location	Depth inches, bgs	Hg Reading mg/m ³
A1	0-6	0.00016
A2	0-6	0.00016 ^{b/}
A3	0-6	0.00010
A4	0-6	0.00008
B1	0-6	0.00010
B2	0-6	0.00010
B3	0-6	0.00010
B4	0-6	0.00014 ^{b/}
C1	0-6	0.00074
C2	0-6	0.00042
C3	0-6	0.00086 ^{b/}
C4	0-6	0.00048
D1	0-6	0.00009
D2	0-6	0.00014 ^{b/}
D3	0-6	0.00010
D4	0-6	0.00010

a/ Samples placed in zip locked baggies, half full, and the head space mercury vapor reading was collected after 15 minutes.

b/ Sample submitted to laboratory for mercury analysis.

C:\IDOC\Nicol\Mercury\Ottawa\[Lumex Readings.xls]Sheet1

**TABLE 2-2
NEWTSON IRON & METAL, INC.**

TIER 1 COMPARISON: SOIL COMPONENT of GROUNDWATER INGESTION

Location	Date	Depth, inches bgs	TCLP Hg, mg/L
<hr/>			
Tier 1 Objective			0.0020
<hr/>			
A2	10/20/00	0-6	<0.0002
B4	10/20/00	0-6	<0.0002
C3	10/20/00	0-6	<0.0002
D2	10/20/00	0-6	<0.0002

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TABLE 2-3
NEWTSON IRON & METAL, INC.
TIER 1 COMPARISON: SOIL INGESTION

Location	Date	Depth, inches bgs	Total Hg, mg/kg
<hr/>			
Tier 1 Objective			
Ind/Comm			610.0
Constr. Wrk			61.0
<hr/>			
A2	10/20/00	0-6	10.7
B4	10/20/00	0-6	14.3
C3	10/20/00	0-6	21.1
D2	10/20/00	0-6	24.5

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- Inhalation

The Tier 1 objective for the inhalation pathway is 540,000 mg/kg for industrial/commercial exposure and 52,000 mg/kg for construction worker exposure. All sample results achieve the objectives; the highest result was 24.5 mg/kg at D2 (see Table 2-4).

Based upon these confirmation sample results, all soils achieve the applicable Tier 1 cleanup objectives for industrial/commercial properties and construction worker exposure.

2.4 Air Monitoring

A Lumex Meter was used to monitor mercury vapors in the work zone as well as around the perimeter of the work area. The following readings were recorded.

Date		10/20/00
Time	Location	Hg Vapor, mg/cu m (nanograms/cu m)
9:30	Work Zone	0.000019 (19)
9:35	North property line (wind from the south)	0.000007 (7)
9:38	West end of scrap yard	0.000008 (8)
9:41	South side of site	0.000007 (7)
9:45	East side of site	0.000014 (14)
10:00	Work Zone	0.000020 (20)

Based on the low mercury vapor readings in the work zone, the scrap segregation was conducted in Level D PPE. Sorting of the scrap was completed by 11:15 AM.

TABLE 2-4
NEWTON IRON & METAL INC.
TIER 1 COMPARISON: INHALATION

Location	Date	Depth, inches bgs	Total Hg, mg/kg
Tier 1 Objective			
Ind/Comm			540,000.0
Constr. Wrk			52,000.0
A2	10/20/00	0-6	10.7
B4	10/20/00	0-6	14.3
C3	10/20/00	0-6	21.1
D2	10/20/00	0-6	24.5

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3. COSTS

The Section 106(a) Order requires that Nicor Gas prepare a good faith estimate of the total costs incurred in complying with the Order. Nicor Gas estimates that approximately \$14,644 has been spent for closure of the Ottawa (Newtonson) Scrap Yard.

The cost breakdown is as follows:

Engineering Oversight (including report preparation).....	\$ 6,795
Contractor (Heritage).....	\$ 4,956 ^a
Analytical.....	\$ 660
Waste Transportation and Disposal	
Hazardous Waste.....	\$ 600 ^b
Non-Hazardous Waste	\$ 1,633

^a Costs through 12/31/01.

^b Estimated value based upon 4 regulators @ \$25/regulator + \$500 pickup and handling.



Ottawa scrap yard facing S.E.



Ottawa scrap yard facing S.W.



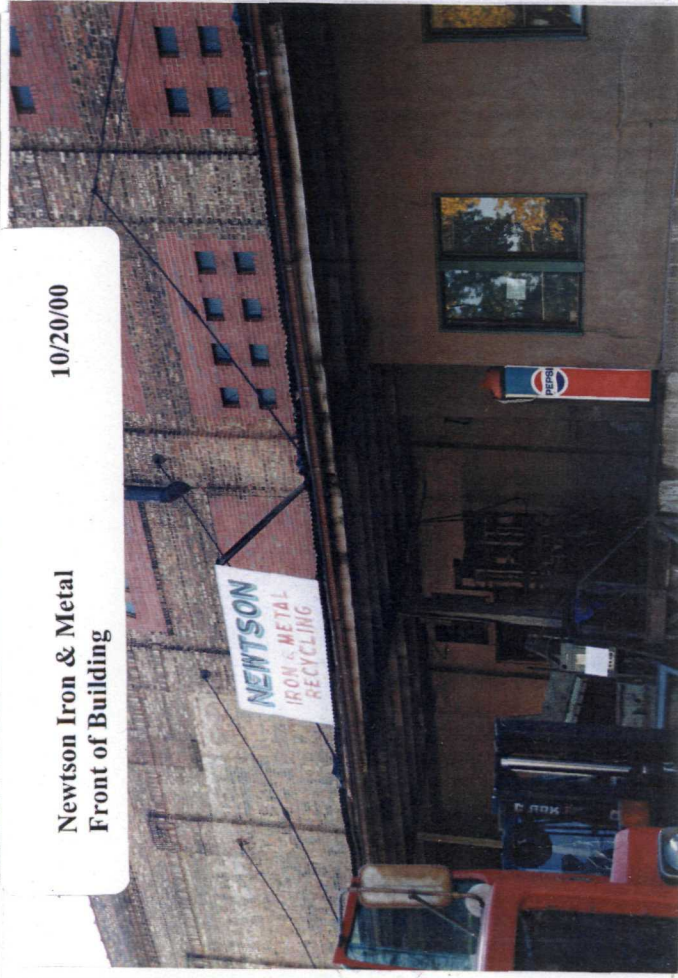
Ottawa scrap yard facing south.



Ottawa - subject pile - looking east.

Newtonson Iron & Metal
Front of Building

10/20/00



Newtonson Iron & Metal
Scrap pile before removal, looking NW

10/20/00

Newtonson Iron & Metal
Smelter, looking NW

10/20/00



Newtonson Iron & Metal
Scrap prior to removal, looking east

10/20/00



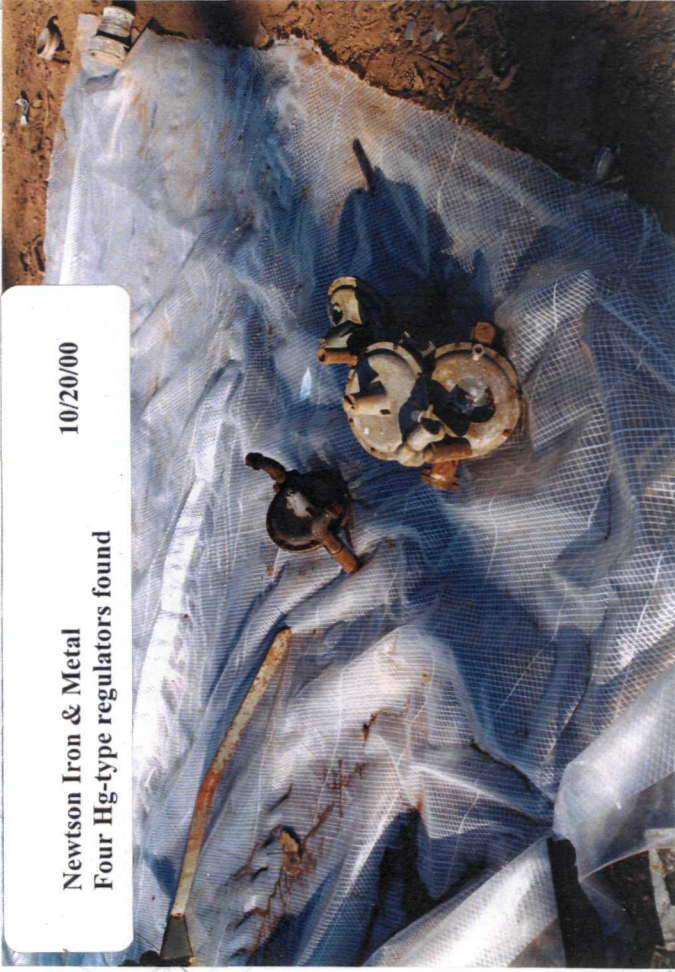
Newton Iron & Metal
Looking south from entrance during scrap
metal removal



Newton Iron & Metal
Soil sampling activities after scrap removal,
looking south



Newton Iron & Metal
Four Hg-type regulators found



Newton Iron & Metal
Area after scrap removal, looking SE





Newtonson Iron & Metal 10/27/00
Setting up to sort Ottawa Reporting Center
Scrap



Newtonson Iron & Metal 10/27/00
Closeup of Ottawa Reporting Center Scrap



Newtonson Iron & Metal 10/27/00
Looking East where Rolloff Box stored (Scrap
from Ottawa behind rolloff



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 792-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

State Form LPC 62 8/81

IL532-0810

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address Nicox 1844 Ferry Rd. Naperville, IL 60560		Location if Different 901 W. Marquette ST. Ottawa, IL		A. Illinois Manifest Document Number IL 9312482 B. Generator's ID Number 0790800024	
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 800-827-5221		5. Transporter 1 Company Name Heritage Transport LLC-HEI		C. Transporter's ID Number 001031446004	
6. Designated Facility Name and Site Address Heritage Environmental Services LLC 15330 Canal Bank Road Lemont, IL 60439		7. Transporter 2 Company Name		D. Transporter's Phone 312-381-6848	
8. US EPA ID Number ILD058484114		9. US EPA ID Number		E. Transporter's ID Number	
10. US EPA ID Number ILD055349264		F. Transporter's Phone		G. Facility's ID Number 0311620007	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	
a. RQ, Hazardous waste, Solid, N.O.S., 9, NA3077, PGIII, (High mercury Debris) (D009) ERG#111		No. Type		14. Unit Wt/Vol	
b.				Waste No.	
c.				EPA HW Number	
d.				EPA HW Number	
Additional Descriptions of Materials Listed Above		K. Handling Codes for Wastes Listed Above			
A-1-CK-Box		In Item #12			
15. Special Handling Instructions and Additional Information 24 HR. Emergency Phone Number 1-800-48-SPILL (InfoTrack)					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Greg R. Cockrean		Signature Greg R. Cockrean		Date 02/22/01	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name Greg R. Cockrean		Signature Greg R. Cockrean	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name Michael Sweltz		Signature Michael Sweltz		Date 02/23/01	

OZINGA

TRANSPORTATION SYSTEMS, INC.

21900 South Central Ave.
Matteson, IL 60443
(708) 720-6000

E 533828

Date 10-31 00
Delivery Date 10-31 00

Ship To: Newton Co. Development
Brook, Pa

Shipper: Nico Ottawa RPTC Center P.O. No. 14062
OTTAWA, IL

	WEIGHT(lb)	PRODUCT DESCRIPTION	C.O.D.	AMOUNT
LOAD		<u>LD Rainforest Box</u>	Price	
EMPTY		<u>Scrap Metal #200333</u>	Tax	
NET			Total	

SOURCE	ADDRESS	TICKET NO.
<u>Nico</u>	<u>Ottawa, IL</u>	<u>E533828</u>

HOURLY			LOAD TIMES					
PORTAL TO PORTAL				1	2	3	4	5
	TIME	LOCATION	Arrive	0906				
Start			Begin Load	0915				
			End Load	0945				
Finish			Depart	1000				
			Total	1.0				

MANIFEST NUMBER:
09908000211

OTSI LINER? Y CN
HOW MANY?
ROLL OFF BOX NUMBERS

DROPPED AT CUSTOMER
Rainforest Box
PICKED UP AT CUSTOMER
200333

COMMENTS
Ple LD Rainforest Box
Scrap Metal To Del
To Newton
Landfill

REQUESTED TIME REASON FOR DELAY

LOADER SIGNATURE [Signature]

DRIVER SIGNATURE [Signature] TRUCK # 728 OTSI TRAILER 9306

UNLOAD TIMES					
	1	2	3	4	5
Arrive					
Begin Unload					
End Unload					
Depart					
Total					

REQUESTED TIME REASON FOR DELAY

RECEIVER SIGNATURE

DRIVER SIGNATURE TRUCK # OTSI TRAILER

CUSTOMER COPY

ALTERNATE STRAIGHT BILL OF LADING—SHORT FORM

Shipper No. 0990800024

Memorandum Copy

Carrier No. _____

OZINGA TRANSPORTATION
(Name of Carrier)

Date 10-31-00

TO: Consignee <u>NENTON CO. DEVELOPMENT</u>		FROM: Shipper <u>NICOR OTTAWA RPTG CENTER</u>	
Street <u>2266 E. 500 SOUTH RD.</u>		Street <u>1629 CHAMPLAIN ST</u>	
Destination <u>BROOK IN</u> Zip Code <u>47922</u>		Origin <u>OTTAWA IL</u> Zip Code <u>61350</u>	
Route: _____		Vehicle No. _____	

No. Shipping Units	Kind of Packaging, Description of Articles Special Marks and Exceptions	Weight (Subject to Correction)	RATE	CHARGES
1	ROLL-OFF BOX SCRAP METAL NON-HAZARDOUS BY DOT TRUCK # 728 TRK 9306 BVI # 220333 Weight: 10,000 LBS			

REMIT C.O.D. TO: ADDRESS	COD Amt: \$	C.O.D. FEE: PREPAID <input type="checkbox"/> COLLECT <input type="checkbox"/> \$	TOTAL CHARGES: \$
--------------------------------	-------------	--	----------------------

<p>Note: When the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.</p> <p>The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ per _____</p>	<p>Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.</p> <p>The carrier shall not make delivery of this shipment without payment of freight and all other charges</p> <p>(Signature of Consignor)</p>	<p>FREIGHT CHARGES</p> <p>Check Appropriate Box:</p> <p><input type="checkbox"/> Freight prepaid <input type="checkbox"/> Collect</p>
--	---	---

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of the shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER PER <u>NICOR GAB</u>	CARRIER PER <u>OZINGA</u>	DATE <u>10-31-00</u>
---------------------------------	------------------------------	----------------------

APPENDIX C

Phone: 630-289-3100
Fax: 630-289-5445

**To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?**

Client #:

Project Name: NICKOL NEWTS ON

Project #:

Site/Location ID: O77A w A State: IL

Report To: LISA PAULSON

Invoice To: LISG Paq/sec

Quote #: PO#: 16912

[illegible]

TestAmerica

INCORPORATED

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Job Number: 00.11747

IEPA Cert. No.: 100221

WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

Project Description: Nicor Newton; Ottawa, IL.

Sample Number	Sample Description	Date Taken	Date Received
603536	A2 (4)	10/20/2000	10/23/2000
603537	B4 (4)	10/20/2000	10/23/2000
603538	C3 (4)	10/20/2000	10/23/2000
603539	D2 (4)	10/20/2000	10/23/2000
603540	Duplicate (C3) (2)	10/20/2000	10/23/2000
603541	1-Field Blank	10/20/2000	10/23/2000
603542	1-Trip Blank	10/20/2000	10/23/2000

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:


Project Manager

Page 1 of 15



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603536

Job No.: 00.11747

Sample Description: A2 (4)
Nicor Newtonson; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	8.56		units	10/25/2000	0.10	kmt	432	SW 9045B
Solids, Total	93.6		%	10/25/2000	0.1	kmt	3785	SM 2540
TCLP Metals Extraction	Leached			10/25/2000		kkp	1300	SW 1311
Mercury, CVAA	10.7		mg/kg dw	10/25/2000	0.043	efw2	887 1003	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603537

Job No.: 00.11747

Sample Description: B4 (4)
Nicor Newtonson; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	8.38		units	10/25/2000	0.10	kmt	432	SW 9045B
Solids, Total	90.9		%	10/25/2000	0.1	kmt	3785	SM 2540
TCLP Metals Extraction	Leached			10/25/2000		kkp	1300	SW 1311
Mercury, CVAA	14.3		mg/kg dw	10/25/2000	0.044	efw2	887 1003	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603538

Job No.: 00.11747

Sample Description: C3 (4)
Nicor Newton; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	8.05		units	10/25/2000	0.10	kmt	432	SW 9045B
Solids, Total	85.3		%	10/25/2000	0.1	kmt	3785	SM 2540
TCLP Metals Extraction	Leached			10/25/2000		kkp	1300	SW 1311
Mercury, CVAA	21.1		mg/kg dw	10/25/2000	0.047	efw2	887 1003	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603539

Job No.: 00.11747

Sample Description: D2 (4)
Nicor Newton; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	8.24		units	10/25/2000	0.10	kmt	432	SW 9045B
Solids, Total	89.9		%	10/25/2000	0.1	kmt	3785	SM 2540
TCLP Metals Extraction	Leached			10/25/2000		kkp	1300	SW 1311
Mercury, CVAA	24.5		mg/kg dw	10/25/2000	0.044	efw2	887 1003	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603540

Job No.: 00.11747

Sample Description: Duplicate (C3) (2)
Nicor Newton; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
Solids, Total	87.5		%	10/25/2000	0.1	kmt	3785	SM 2540
Mercury, CVAA	29.7		mg/kg dw	10/25/2000	0.046	efw2	887 1003	SW 7471A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603541

Job No.: 00.11747

Sample Description: 1-Field Blank
Nicor Newton; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



ANALYTICAL REPORT

Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Sample No. : 603542

Job No.: 00.11747

Sample Description: 1-Trip Blank
Nicor Newton; Ottawa, IL.

Date Taken: 10/20/2000
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/23/2000
Time Received: 15:40
WDNR Cert. No. 999447130

Parameter	Result	Flag	Units	Date Analyzed	Reporting Limit	Analyst	Batch No. Prep/Run	Analytical Method
Mercury, CVAA	<0.0002		mg/L	10/26/2000	0.0002	efw2	1623 1464	SW 7470A



QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525
Ms. Lisa Paulson

10/30/2000

Job Number: 00.11747

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Percent Recovery
pH, Non-Aqueous	432	7.00	7.05	100.7
pH, Non-Aqueous	432	7.00	7.04	100.6
Mercury, CVAA	1464	0.0025	0.00248	99.2
Mercury, CVAA	1003	0.00250	0.00236	94.4

CCV - Continuing Calibration Verification



QUALITY CONTROL REPORT

BLANK ANALYSIS

HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525
Ms. Lisa Paulson

10/30/2000

Job Number: 00.11747

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Solids, Total		3785	<0.1	%	0.1	SM 2540
Mercury, CVAA	1623	1464	<0.0002	mg/L	0.0002	SW 7470A
TCLP Metals Extraction		1300	Leached			SW 1311
Mercury, CVAA	887	1003	<0.040	mg/Kg	0.040	SW 7471A



QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525
Ms. Lisa Paulson

10/30/2000

Job Number: 00.11747

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
Mercury, CVAA	1623	1464	0.0025	0.00257	102.8
Mercury, CVAA	887	1003	0.00250	0.00237	94.8



QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525
Ms. Lisa Paulson

10/30/2000

Job Number: 00.11747

Analyte	Prep	Run	Matrix									MSD			MS/MSD RPD
	Batch	Batch	Spike	Sample	Spike			Percent	MSD	Spike			Percent		
	Number	Number	Result	Result	Amount	Units	Recovery	Result	Amount	Units	Recovery	Result	Recovery		
Mercury, CVAA	1623	1464	0.00259	<0.0002	0.0025	mg/L	103.6	0.0025	0.0025	mg/L	102.0	1.6			
Mercury, CVAA	887	1003	0.639	0.32	0.35	mg/kg	91.1	0.739	0.40	mg/kg	104.8	14.5			
Mercury, CVAA	887	1003	0.416	<0.040	0.38	mg/kg	109.5	0.442	0.41	mg/kg	107.8	6.1			

NOTE: Matrix Spike Samples may not be samples from this job.

For Inorganic Parameters and GC Volatiles, the spike recovery should be 75 - 125% if the spike added value was greater than or equal to one fourth of the sample result value. If not, the control limits are not established. The RPD for the MS/MSD pair should be less than 20.

MS = Matrix Spike

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference

RPD calculations are performed on the Percent Recovery calculated from the observed Matrix spike and Matrix Spike Duplicate results.



QUALITY CONTROL REPORT

DUPLICATES

HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525
Ms. Lisa Paulson

10/30/2000

Job Number: 00.11747

Analyte	Prep Batch Number	Run Batch Number	Original Analysis	Duplicate Analysis	Units	RPD
pH, Non-Aqueous		432	8.24	8.22	units	0.2
Solids, Total		3785	83.3	82.5	%	1.0

NOTE: Spikes and Duplicates may not be samples from this job.

RPD - Relative Percent Difference



Ms. Lisa Paulson
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

10/30/2000

Job Number: 00.11747

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Project Description: Nicor Newton; Ottawa, IL.

CASE NARRATIVE

No analytical exceptions were noted outside of routine method protocols.

TestAmerica

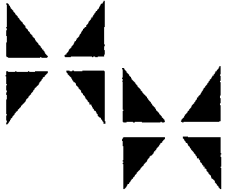
INCORPORATED

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	: Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	: Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	: Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	: Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	: These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	: These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	: Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	: Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	: Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	: Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	: Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

- (1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.
- (2) ASTM "American Society for Testing Materials"
- (3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.
- (4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.
- (5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.
- (6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.
- (7) See "Methods for the Determination of Metals in Environmental Samples", Supplement I EPA-600/R-94/111, May 1994.
- (8) See "Standard Methods for the Examination of Water and Wastewater", 18th Ed., APHA, 1992.
- (9) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986, Including Updates I and II.
- (10) This method is from the 2nd Edition of "Test Methods for Evaluating Solid Waste", USEPA SW-846. It has been dropped from the 3rd Edition, 1986.



HUFF & HUFF, INC.

Environmental Consultants

512 W. Burlington, Suite 100
LaGrange, Illinois 60525

Phone (708) 579-5940
Fax (708) 579-3526

March 3, 2001

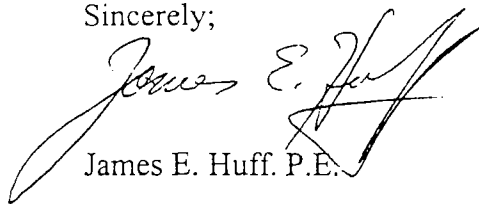
John Watson, Esquire
Gardner, Carton & Douglas
321 North Clark, Suite 3400
Chicago, IL

Re: Nicor Gas-Newton Scrap Metal

Dear John:

Enclosed please find a copy of the Draft Report on the mercury removal action at the Newton Iron & Metal site. We will finalize this report upon receipt of your comments. We are also waiting on your comments on the Reporting Center Report, before finalizing this report. Our intent is to start on the DeKalb Iron & Metal Report next, which will be similar to the Newton Report.

Sincerely;



James E. Huff, P.E.

bcc: Claudia Macholz, Nicor